

IN THE CLAIMS

Please amend the claims as follows:

---

Claims 1-27 (Canceled).

Claim 28 (New): A signal processing apparatus comprising:

a noise suppressor, which has a plurality of different noise suppression algorithms, configured to suppress background noise contained in a speech signal; and

A  
a speech encoder, which has a plurality of different speech coding algorithms each corresponding to one of the different noise suppression algorithms, configured to encode the suppressed speech signal using one of the different speech coding algorithms,

wherein the noise suppressor selects a noise suppression algorithm being preset corresponding to the used speech coding algorithm.

Claim 29 (New): A signal processing apparatus comprising:

a noise suppressor, which has a plurality of different noise suppression algorithms, configured to suppress background noise contained in a speech signal; and

a speech encoder, which has a plurality of different speech coding rates each corresponding to one of the different noise suppression algorithms, configured to encode the suppressed speech signal using one of the different speech coding algorithms,

wherein the noise suppressor selects a noise suppression algorithm being preset corresponding to the used speech coding rate.

Claim 30 (New): The signal processing apparatus according to claim 29, wherein the noise suppressor further comprises a frequency divider for dividing the speech signal into a plurality of speech signal, each of the divided speech signals having a different frequency

band, the noise suppressor only suppressing background noise contained in the speech signal of a predetermined frequency band being preset corresponding to the used speech coding rate.

Claim 31 (New): The signal processing apparatus according to claim 29, wherein the noise suppressor further comprises a frequency divider for dividing the speech signal into a plurality of speech signal, each of the divided speech signals having a different frequency band, said noise suppressor stops suppressing background noise contained in the speech signal of a predetermined frequency band being preset corresponding to the used speech coding rate.

A  
Claim 32 (New): The signal processing apparatus according to claim 29, wherein the noise suppressor stops suppressing background noise contained in the speech signal if the speech encoder selects a predetermined speech coding rate for encoding the speech signal.

Claim 33 (New): The signal processing apparatus according to claim 28, wherein the noise suppressor further comprises a parameter setting means for setting a parameter, which is preset corresponding to one of the speech coding algorithms, so as to select a noise suppression algorithm, the parameter varies the noise suppression algorithm.

Claim 34 (New): The signal processing apparatus according to claim 29, wherein the noise suppressor further comprises a parameter setting means for setting a parameter, which is preset corresponding to one of the speech coding rates, so as to select a noise suppression algorithm.

Claim 35 (New): A signal processing apparatus comprising:

a speech decoder, which has a plurality of different speech decoding algorithms each corresponding to one noise suppression algorithm, configured to decode an encoded speech signal using one of the different speech decoding algorithms; and

a noise suppressor, which has a plurality of different noise suppression algorithms, configured to suppress noise component contained in the decoded speech signal,

wherein the noise suppressor selects a noise suppression algorithm being preset corresponding to the used speech decoding algorithm.

Claim 36 (New): A signal processing apparatus comprising:

a speech decoder, which has a plurality of different speech decoding rates each corresponding to one noise suppression algorithm, configured to decode an encoded speech signal using one of the different speech decoding algorithms; and

a noise suppressor, which has a plurality of different noise suppression algorithms, configured to suppress noise component contained in the decoded speech signal,

wherein the noise suppressor selects a noise suppression algorithm being preset corresponding to the used speech decoding rate.

Claim 37 (New): The signal processing apparatus according to claim 36, wherein the noise suppressor only suppresses the noise component contained in the decoded speech signal of a predetermined frequency band being preset corresponding to the used speech decoding rate.

Claim 38 (New): The signal processing apparatus according to claim 36, wherein the noise suppressor stops suppressing the noise component contained in the decoded speech

signal of a predetermined frequency band being preset corresponding to the used speech decoding rate.

Claim 39 (New): The signal processing apparatus according to claim 36, wherein the noise suppressor stops suppressing noise component contained in the decoded speech signal if the speech decoder selects a predetermined speech decoding rate for decoding the encoded speech signal.

Claim 40 (New): The signal processing apparatus according to claim 35, wherein the noise suppressor further comprises a parameter setting means for setting a parameter, which is preset corresponding to one of the speech decoding algorithms, so as to select a noise suppression algorithm, the parameter varies the noise suppression algorithm.

Claim 41 (New): The signal processing apparatus according to claim 36, wherein the noise suppressor further comprises a parameter setting means for setting a parameter, which is preset corresponding to one of the speech decoding rates, so as to select a noise suppression algorithm.

Claim 42 (New): A signal processor for use in a device in which a hands-free function is selectively usable, the apparatus comprising:

a noise suppressor, which has a first noise suppression algorithm corresponding to the hands-free function and a second noise suppression algorithm corresponding to a non-hands-free function, configured to suppress background noise contained in a speech signal; and

a switch configured to select the first or second noise suppression algorithm in accordance with the used function.

Claim 43 (New): The signal processor according to claim 42, wherein the noise suppressor further comprises a parameter setting means for setting a parameter, which is preset corresponding to one of the hands-free function and the non-hands-free function, so as to select a noise suppression algorithm, the parameter varies the noise suppression algorithm.

Claim 44 (New): A mobile radio communication terminal having a signal processor, the signal processor comprising:

a noise suppressor, which has a plurality of different noise suppression algorithms, configured to suppress background noise contained in a speech signal; and

a speech encoder, which has a plurality of different speech coding algorithms each corresponding to one of the different noise suppression algorithms, configured to encode the suppressed speech signal using one of the different speech coding algorithms,

wherein the noise suppressor selects a noise suppression being preset corresponding to the used speech coding algorithm.

Claim 45 (New): A mobile radio communication terminal having a signal processor, the signal processor comprising:

a noise suppressor, which has a plurality of different noise suppression algorithms, configured to suppress background noise contained in a speech signal; and

a speech encoder, which has a plurality of different speech coding rates each corresponding to one of the different noise suppression algorithms, configured to encode the suppressed speech signal using one of the different speech coding rates,

wherein the noise suppressor selects a noise suppression algorithm corresponding to the used speech coding rate.

Claim 46 (New): A signal processing apparatus comprising:

a noise suppressor having a plurality of different noise suppression characteristics, suppressing background noise contained in a speech signal, where the number of the noise suppression characteristics is a positive integer Q; and

a speech encoder having a plurality of different speech coding algorithms, encoding the suppressed speech signal by using one of the different speech coding algorithms, where the number of the coding speech coding algorithms is a positive integer P,

wherein the noise suppressor selects a noise suppression characteristic in accordance with the used speech coding algorithm at the speech encoder, and the following relationship is established:

A

$$P \geq Q > 1.$$

Claim 47 (New): A signal processing apparatus comprising:

a noise suppressor having a plurality of different noise suppression characteristics, suppressing background noise contained in a speech signal, where the number of the noise suppression characteristics is a positive integer Q; and

a speech encoder having a plurality of different speech coding rates, encoding the suppressed speech signal by using one of the different speech coding rates, where the number of the speech coding rates is a positive integer R,

wherein the noise suppressor selects a noise suppression characteristic in accordance with the used speech coding rate at the speech encoder, and the following relationship is established:

$$R \geq Q > 1.$$

Claim 48 (New): A signal processing apparatus comprising:

a noise suppressor having a plurality of different noise suppression characteristics, suppressing background noise contained in a speech signal, the noise suppression characteristics being varied in accordance with a parameter set by a parameter setting means; and

a speech encoder having a plurality of different speech coding algorithms, encoding the suppressed speech signal by using one of the different speech coding algorithms, where the number of the speech coding algorithms is a positive integer P,

wherein the parameter setting means sets a suitable parameter so as to select a noise suppression characteristic in accordance with the used speech coding algorithm at the speech encoder, where the number of the parameter is a positive integer S, and the following relationship is established:

$$P \geq S > 1.$$

Claim 49 (New): A signal processing apparatus comprising:

a noise suppressor having a plurality of different noise suppression characteristics, suppressing background noise contained in a speech signal, the noise suppression characteristics being varied in accordance with a parameter set by a parameter setting means; and

a speech encoder having a plurality of different speech coding rates, encoding the suppressed speech signal by using one of the different speech coding rates, where the number of the speech coding rates is a positive integer R,

wherein the parameter setting means sets a suitable parameter so as to select a noise suppression characteristic in accordance with the used speech coding rate at the speech

encoder, where the number of the parameter is a positive integer S, and the following relationship is established:

$$R \geq S > 1.$$

Claim 50 (New): A signal processing apparatus comprising:

a noise suppressor having a plurality of different noise suppression algorithms, suppressing background noise contained in a speech signal, where the number of the noise suppression algorithms is a positive integer Q; and

a speech encoder having a plurality of different speech coding algorithms, encoding the suppressed speech signal by using one of the different speech coding algorithms, where the number of the speech coding algorithms is a positive integer P,

wherein the noise suppressor selects a noise suppression algorithm in accordance with the used speech coding algorithm at the speech encoder, and the following relationship is established:

$$P \geq Q > 1.$$

Claim 51 (New): A signal processing apparatus comprising:

a noise suppressor having a plurality of different noise suppression algorithms, suppressing background noise contained in a speech signal, where the number of the noise suppression algorithms is a positive integer Q; and

a speech encoder having a plurality of different speech coding rates, encoding the suppressed speech signal by using one of the different speech coding rates, where the number of the speech coding rates is a positive integer R,



wherein the noise suppressor selects a noise suppression algorithm in accordance with the used speech coding rate at the speech encoder, and the following relationship is established:

$$R \geq Q > 1.$$

Claim 52 (New): A signal processing apparatus comprising:

a noise suppressor having a plurality of different noise suppression algorithms, suppressing background noise contained in a speech signal, the noise suppression algorithms being varied in accordance with a parameter set by a parameter setting means; and

a speech encoder having a plurality of different speech coding algorithms, encoding the suppressed speech signal by using one of the different speech coding algorithms, where the number of the speech coding algorithms is a positive integer P,

wherein the parameter setting means sets a suitable parameter so as to select a noise suppression algorithm in accordance with the used speech coding algorithm at the speech encoder, where the number of the parameter is a positive integer S, and the following relationship is established:

$$P \geq S > 1.$$

Claim 53 (New): A signal processing apparatus comprising:

a noise suppressor having a plurality of different noise suppression algorithms, suppressing background noise contained in a speech signal, the noise suppression algorithms being varied in accordance with a parameter set by a parameter setting means; and

a speech encoder having a plurality of different speech coding rates, encoding the suppressed speech signal by using one of the different speech coding rates, where the number of the speech coding rates is a positive integer R,

wherein the parameter setting means sets a suitable parameter so as to select a noise suppression algorithm in accordance with the used speech coding rate at the speech encoder, where the number of the parameter is a positive integer S, and the following relationship is established:

$$R \geq S > 1.$$